

Fall 2003:
SMS 618: Particle Dynamics in Aquatic Systems
(3 credits)

Instructor: Emmanuel Boss
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<http://www.marine.maine.edu/~eboss/classes.htm>

Meeting times: Thursday, 11-12:15 & 2:10-3:25 at 220 Libby Hall.

In this course we will examine the geological, physical, chemical and biological processes associated with, and mediated by, particulate matter in aquatic systems. The material will include the mathematical description of the conservation equations associated with particulate material and the mathematical description of the processes associated with this material.

Processes covered will include: settling, erosion, deposition, and transport of particulate material. Interactions among particles (flocculation, aggregation, and breakup) and with dissolved materials in the water will also be covered.

The class will be comprised of paper discussions, hands-on laboratory sessions and demonstration (possibly a field trip), and lectures. Students will also assist in developing a comprehensive web site with relevant material for the benefit of the greater aquatic community.

Grading will be based on participation, weekly assignments, and a term project which will be presented to the class.